OxyChem Community Involvement Group Meeting Notes Wednesday, August 31, 2016

The 227th meeting of the OxyChem Wichita Plant Community Involvement Group (CIG) was held on Wednesday, August 31, 2016 at the USD261 Haysville Learning Center. Facilitator Diane Sheridan reviewed the agenda, which was accepted as presented. Meeting notes from June were approved without change

ATTENDEES in italics

CIG Members Terry Behrendt Ken Bell Jack Brown Clem Dickerson Phil Harris Elaine Harvey Phil Hornbeck Tom Kneil Elvin Leedy Shawn Maloney

Beverly McKibban

Larry Parsons

Clint Schutte, USD 261 Sedgwick Co. Fire Dept, reps **Judith Spor** Laura Swanson Ben Swart Victor Swart Donnah Taylor (on leave) Jeff Whitfield, Haysville PD Wichita Fire Dept

Observers/Speakers Harold Edward Russ England KDHE

Charles Janson Chad Milliaan Tim Norton, Co. Commissioner Michael O'Donnell Brad Roberts, EPA Susan Walston John Whitmer Hugh Williamson

Facilitator Diane Sheridan OxyChem Liaisons & Resources

Steve Hieger, Plant Manager Chris Nolan Mark Reisch Nancy Thimmesch David Anderson, GSH Arden Unruh Lisa Thurman Mike Garza

Fric Miller Nick Rall

RCRA



UPDATES

OxyChem – Plant manager Steve Hieger reported:

- A two-week planned maintenance outage starting October 3 will include both maintenance and capital projects.
- Members were interested to learn that some of the plant's products are affected by new food safety regulations that cover what goes into food. While it is taking a major initiative to comply with the new rules, doing so offers new marketing opportunities for plant products.
- Investigation is still underway into the tragic deaths of two contractors who died when their boom truck failed. OSHA is investigating. By OxyChem rules for contractors, the contracting company must provide a full report to the plant after its investigation is complete. Emergency responders arrived within minutes after plant horns sounded.
- The plant is working to resolve drainage problems that cause heavy rains to flow onto the plant site from Ridge Road.
- Employment offers to 12 new hire candidates will be made the week after the meeting due to attrition and retirements.

CAN System -- Chris Nolan reported that the Community Alert Network (CAN) was tested as planned. Responses were received from all but two members. One member commented favorably on the part of the voice message stating that a call would be made to the next number on her list because no one answered the first number.

Annual Report from Glenn Springs Holdings on the Corrective Action Program for On-Site and Off-Site Soils and Groundwater

The Annual Report from Glenn Springs Holdings on the Corrective Action Program for On-Site and Off-Site Soils and Groundwater was presented by David Anderson. Charles Janson served as a resource.

Brad Roberts, US Environmental Protection Agency (EPA) Project Manager for the plant's corrective action program, served as a resource to explain the public involvement opportunities associated with the Statement of Basis EPA will make regarding remediation at the site.

The EPA corrective action program is a phased process that began in the late 1980s at the Wichita plant. The Resource Conservation and Recovery Act (RCRA) Feasibility Facility Investigation (RFI) is nearly complete. Additional vapor intrusion investigations, to be conducted under the Corrective Measures Study, will verify whether existing controls are working and also examine additional structures. Currently, the Corrective Measures Study (CMS) is underway, with a report on options due to EPA in the spring. EPA will look at these options, select one or more remedies, and prepare a Statement of Basis to explain its reasoning for those choices. Their goal as they make decisions is to prevent exposure. The public will have the opportunity to comment on the Statement of Basis, and the agency will respond to those comments. A public meeting will also be held. Asked about the plant's input at that point in the process, Roberts said there is conversation with the plant throughout the process, but they may also comment at the public comment period. There is also a process for appealing an EPA decision. In addition to the required public notice, Roberts will make Sheridan aware of the public comment and meeting plans so that she may share that information with the CIG mailing list.

Though the corrective action process is long and complex, it allowed for interim corrective measures, mostly notably the interceptor well system. Anderson showed a map of the locations where RFI borings have been made. Semiannual groundwater sampling continues to take place. The results of the fall 2015 sampling were presented. Last spring's sampling results are still undergoing quality assurance/quality control and analysis. Anderson reviewed the fall 2015 results for 5 chemicals. In each case, the outer edge of the purple area on the attached slides is the screening level associated with the water quality standard for that chemical. It varies by chemical.

Asked if the plume is growing or shrinking, Anderson said the plumes have stabilized and the concentrations of the chemicals are declining. After these two things occur, the focus becomes shrinking the plume. The highest concentrations of each chemical are within the plant's boundaries. In the case of carbon tetrachloride, the plume to the east is likely to be influenced by its use in grain elevators as a fumigant.

Asked if the plant will ever get past the need to remediate the plumes, several people commented that chlorinated solvents are difficult to clean up totally.

Asked if the separate chemicals can mix and react to make a different and more toxic chemical, Anderson said the contaminants are in the same chemical family so they do not react with each other. A plant representative commented that one of the reasons they are hard to remediate is that they are so stable.

Evaluation shows that the interceptor well system is working. A new air stripping system will be added later this year. Its purpose is to treat groundwater from the interceptor well system to lower the concentration of contaminants before the water is sent to the carbon treatment system.

Members were reminded that key corrective action documents are placed in a repository at the Haysville Library to make them available to the public. Anderson will work with Lisa Thurman to add some recent reports.

PLANS FOR UPCOMING MEETINGS

Unless otherwise indicated on the agenda for that meeting, meetings will be held at Haysville Learning Center and will begin at 6:30 p.m. and end no later than 8:30 p.m. A light meal will be available at 6:15 p.m.

Tuesday, November 15, 2016 – Stormwater Management, Water Conservation, and the Annual SARA Toxics Release Inventory (TRI) Report

- OxyChem will review what happens to rainwater that falls on the plant in chemical process areas vs. nonprocess areas, explaining where it flows and how it is managed.
- The Annual Superfund Amendments and Reauthorization Act (SARA) Toxics Release Inventory (TRI) will include updates for calendar years 2014 and 2015. It will cover the usual categories: air, land (deepwell), and off-site transfers.
- The plant will report on its water conservation efforts, including the wastewater treatment plant, and discuss whether additional water usage reductions are being considered.
- The relationship between stormwater management, water conservation, and deepwell best practices will be noted.

February 2017 - Annual State of the Plant Report. Program Planning

WICHITA PLANT PROJECT STATUS

GLENN SPRINGS HOLDINGS, INC.

David Anderson, Director, Glenn Springs Holdings Charles Janson, Project Manager, GHD August 31, 2016



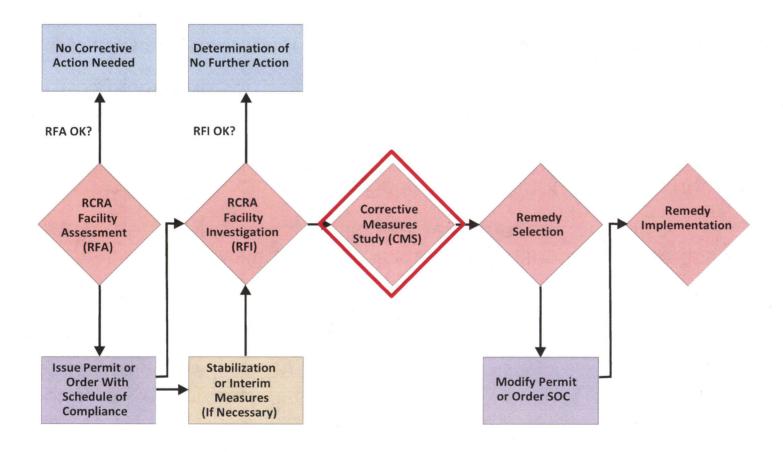
Agenda

- Program overview
- Major work from 2015-2016
- Next steps

Corrective Action Regulatory Framework

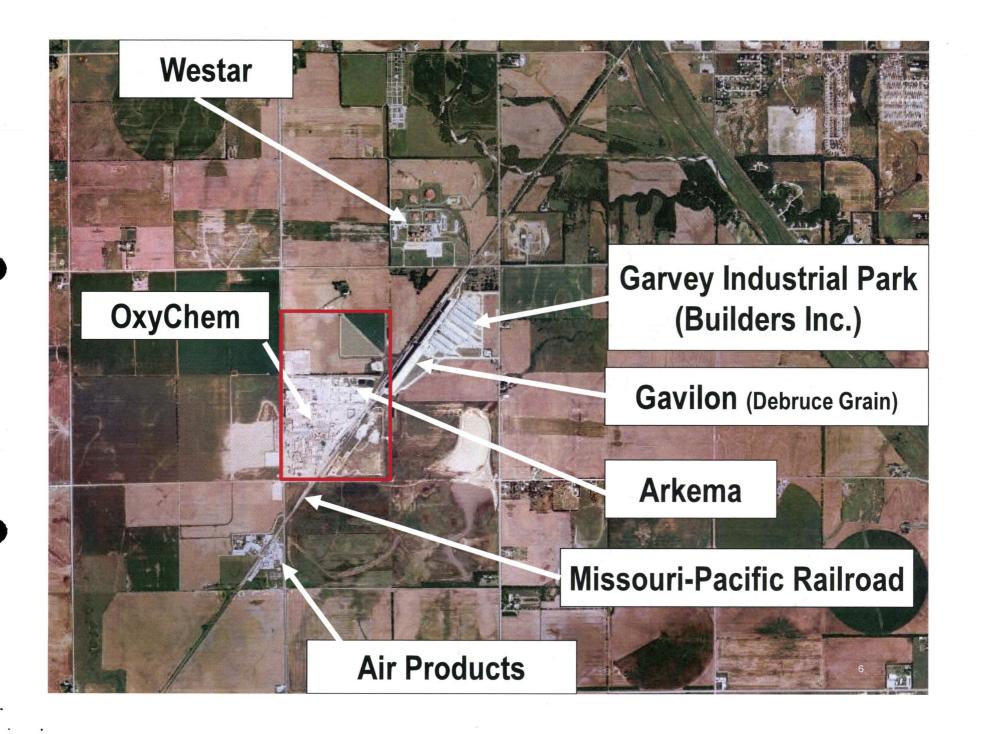
- 1989 a Resource Conservation and Recovery Act (RCRA) Permit (Permit) is issued for the Plant
- 1990s EPA becomes increasingly involved in support of KDHE oversight
- 2007 OCC renews the Permit, including revised corrective action requirements for over 150 Solid Waste Management Units
- 2008 a draft corrective action Schedule of Work is agreed upon with EPA
- EPA will issue a Statement of Basis to document completion of investigation and corrective measures studies
- Operation and maintenance of corrective measures is expected to continue under Agency oversight

USEPA Region 7 RCRA Corrective Action Flowchart

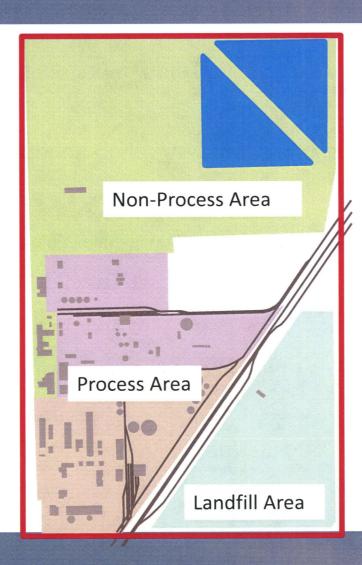


Major Work from 2015-2016

- Completed the Corrective Measures Study Work
 Plan
- Completed the On-Site Vapor Intrusion Work Plan
- Performed a source area recovery pilot study
- Prepared the Human Health Risk Assessment
- Continued groundwater sampling program
- Continued interceptor well system enhancements



Site Areas

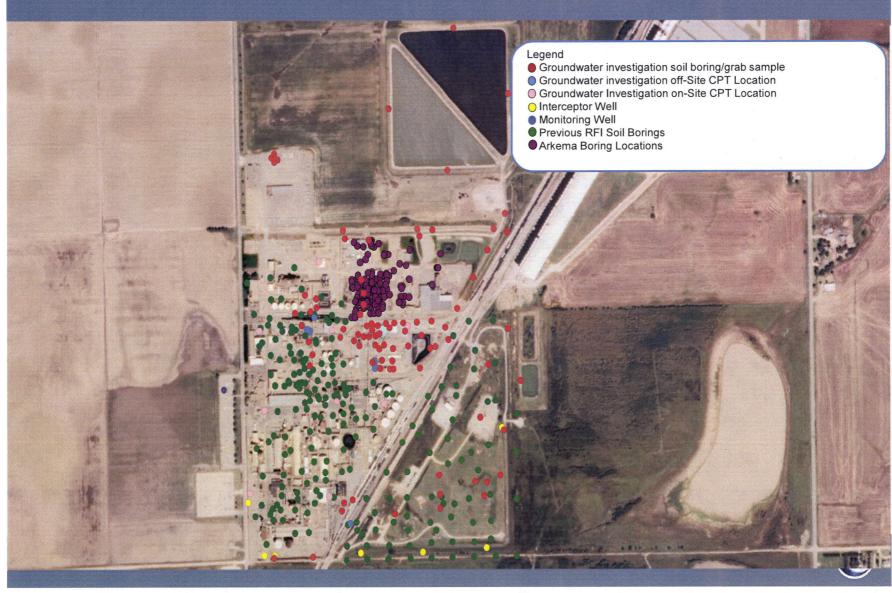


Review of the RFI Soil and Groundwater Conclusions

Potential sources of groundwater contamination were identified using the following data sources:

- Historical documentation and process chemistry
- Historical investigation data
- Historical and recent hydraulic and chemical data from the permanent monitoring well network
- 2008-2014 RFI data
- Third-party investigation of the Arkema facility under KDHE oversight
- KDHE offsite investigation events

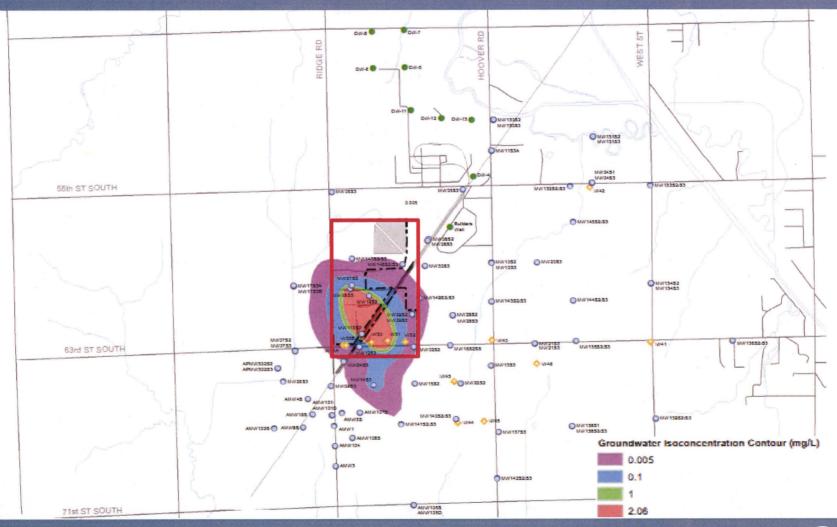




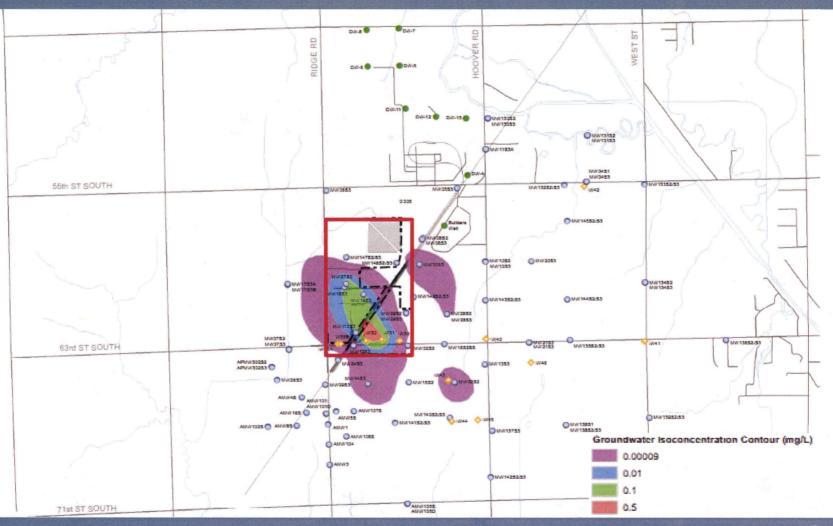
Semiannual Groundwater Sampling Program Update

- Two semiannual groundwater sampling events have been performed since the last CIG meeting
- The following groundwater contour maps are based on the Fall 2015 semiannual event, as reported to EPA, and do not include past onetime Oxy or KDHE samples

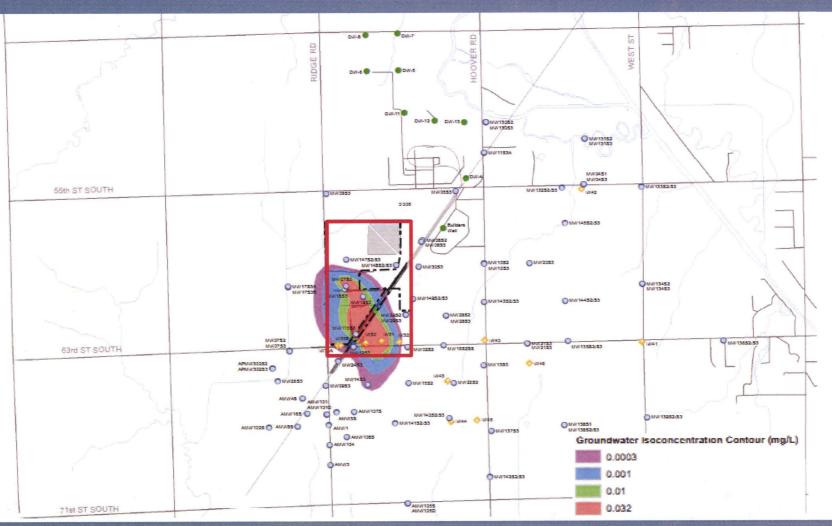
Tetrachloroethene (PERC) in S2/S3 Groundwater



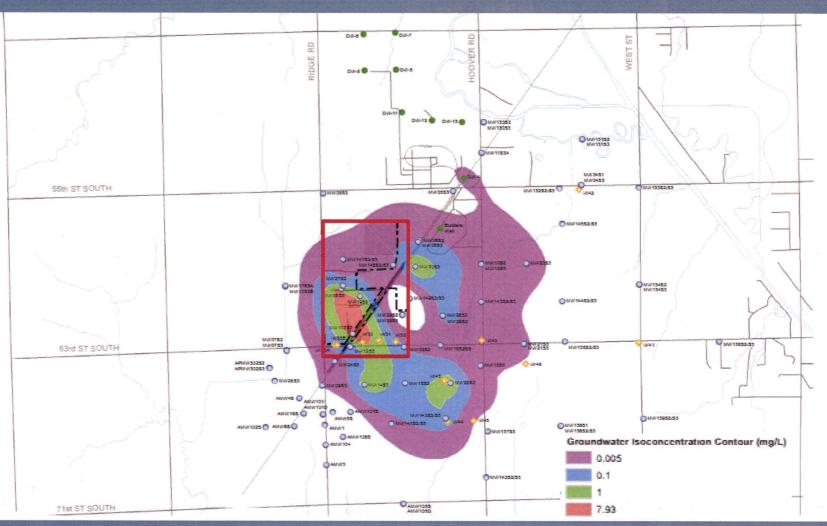
Hexachloroethane in S2/S3 Groundwater



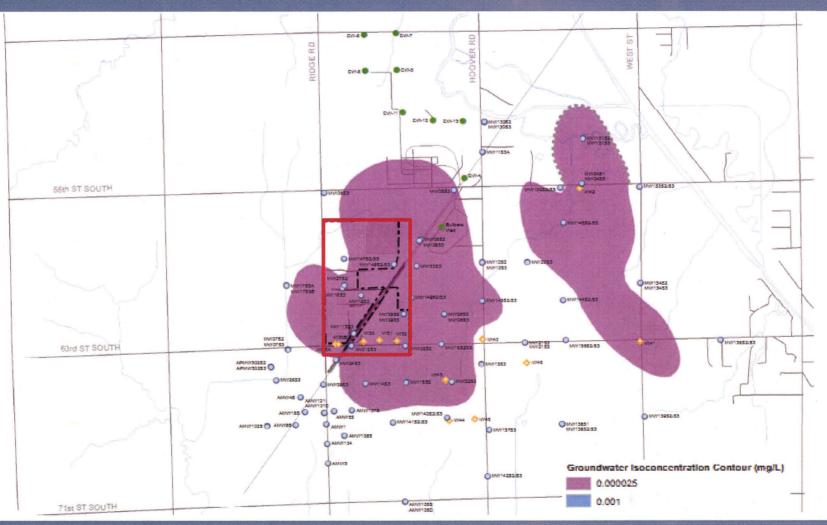
Hexachlorobutadiene in S2/S3 Groundwater



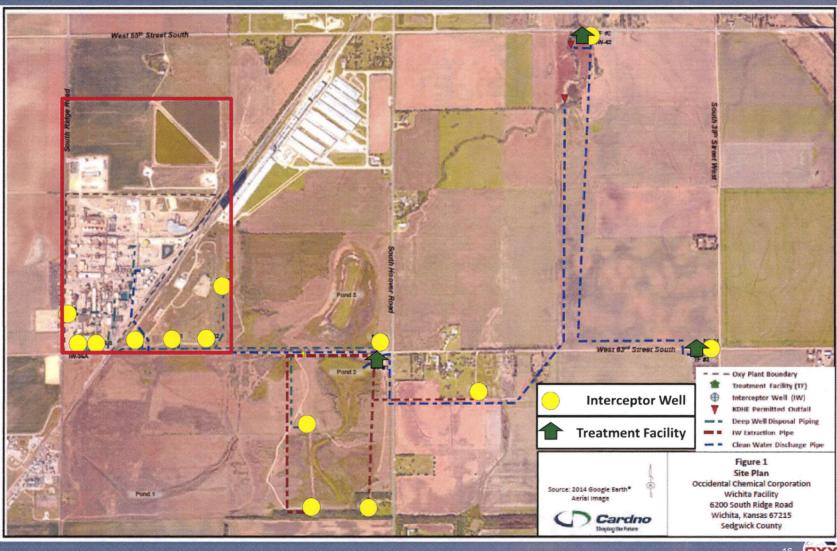
Carbon Tetrachloride in S2/S3 Groundwater



g-BHC in S2/S3 Groundwater



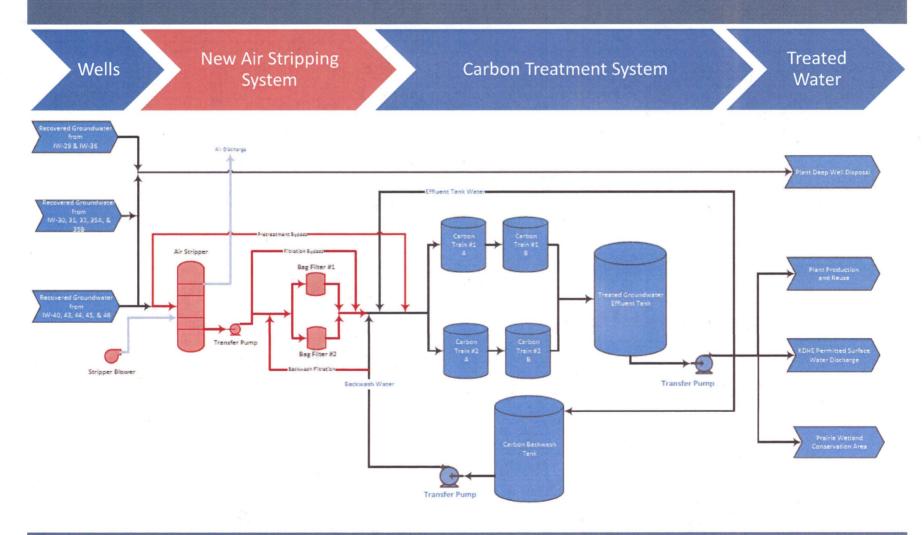
Treatment System Layout



Interceptor Well System Enhancements

- Completed construction and startup of the supplemental interceptor well treatment plant in January 2015
- Fully-automated treatment operations to receive groundwater from IW-40, IW-44, IW-45, and IW-46
- Per KDHE discharge permit, groundwater can be managed for discharge or disposal via:
 - Plant production and reuse
 - Surface water discharge
 - Prairie Wetland Conservation Area
 - Plant deep well disposal
- Successful startup evaluation determined that the treatment system is working effectively
- Planned system enhancements

Treatment System Upgrades



Next Steps

2015

2016

2017

2018

RFI & Risk Assessment Pilot Studies and CMS

Construction and Operation

Risk Assessment

Process Building Evaluation and Potential Remedy Enhancement

Source Area Pilot Test

Soils Pre-Design Work

Ongoing Groundwater Remedy Performance Evaluation

Groundwater Remedy Enhancements

CM Implementation →



Conclusions

- The Facility Investigation Phase is complete.
- The Corrective Measures Study Work Plan is complete and the Corrective Measures Study is underway.
- The Vapor Intrusion Work Plan has been tentatively approved.
- The groundwater recovery and treatment system major construction is complete. Additional enhancements are in progress.
- Multiple sources of information are available to the public through the repository, EPA and regular CIG meetings, which will serve as the foundation for formal public comment to the EPA Statement of Basis.

END

